

**IN THE CLAIMS:**

Please amend claims 1, 8, 15-17, 22, 27 and 28 as follows.

1. (Currently Amended) A method, comprising:

receiving a packet;

determining a number of tokens in a token bucket; ~~and~~

calculating a probability for marking the received packet with a precedence level when the number of tokens in the token bucket are between a first threshold and a second threshold; and

marking packet for a particular forwarding treatment using at least one token bucket.

2. (Original) The method of claim 1, further comprising marking the packet with a high precedence level if the number of tokens exceeds a first threshold.

3. (Original) The method of claim 1, further comprising marking the packet with a low precedence level if the number of tokens is less than a second threshold, wherein the second threshold is lower than the first threshold.

4. (Original) The method of claim 1, further comprising marking the packet with a low precedence value or a high precedence value based on the calculated probability

when the number of tokens in the token bucket are between the first and second thresholds.

5. (Original) The method of claim 4, wherein the probability of marking the received packet with a low precedence is lowered when a previously received packet was marked with a low precedence.

6. (Original) The method of claim 1, wherein the number of tokens in the token bucket are inversely proportional to the amount of network traffic.

7. (Original) The method of claim 6, wherein the probability of marking the received packet with a low precedence is inversely proportional to the number of tokens in the token bucket.

8. (Currently Amended) A packet marking system, comprising:  
a receiving engine capable of receiving a packet for marking;  
a marker engine, communicatively coupled to the receiving engine, capable of determining the number of tokens in a token bucket; and  
a probability engine, communicatively coupled to the marker engine, capable of calculating a probability for marking the received packet with a precedence level when

the number of tokens in the token bucket are between a first threshold and a second threshold; wherein

the marking engine is configured to mark packet for a particular forwarding treatment using at least one token bucket.

9. (Original) The system of claim 8, wherein the marker engine is further capable of marking the packet with a high precedence level if the number of tokens exceeds a first threshold.

10. (Original) The system of claim 8, wherein the marker engine is further capable of marking the packet with a low precedence level if the number of tokens is less than a second threshold, wherein the second threshold is lower than the first threshold.

11. (Original) The system of claim 8, wherein the marker engine is further capable of marking the packet with a low precedence value or a high precedence value based on the calculated probability when the number of tokens in the token bucket are between the first and second thresholds.

12. (Original) The system of claim 11, wherein the probability of marking the received packet with a low precedence is lowered when a previously received packet was marked with a low precedence.

13. (Original) The system of claim 8, wherein the number of tokens in the token bucket are inversely proportional to the amount of network traffic.

14. (Original) The system of claim 13, wherein the probability of marking the received packet with a low precedence is inversely proportional to the number of tokens in the token bucket.

15. (Currently Amended) A computer-readable medium having stored thereon instructions for a processor to execute a method, the method comprising:

receiving a packet;

determining a number of tokens in a token bucket; ~~and~~

calculating a probability for marking the received packet with a precedence level when the number of tokens in the token bucket are between a first threshold and a second threshold; and

marking packet for a particular forwarding treatment using at least one token bucket.

16. (Currently Amended) A system comprising:

means for receiving a packet;

means for determining a number of tokens in a token bucket; ~~and~~

means for calculating a probability for marking the received packet with a precedence level when the number of tokens in the token bucket are between a first threshold and a second threshold; and

means for marking packet for a particular forwarding treatment using at least one token bucket.

17. (Currently Amended) A method, comprising:  
receiving a packet;  
determining a number of tokens in a first token bucket;  
determining a precedence value for marking the packet based on the determined number of tokens; ~~and~~

upgrading the determined precedence value to a higher precedence value when a pre-specified number of previously received packets were marked with the same determined precedence value; and

marking packet for a particular forwarding treatment using at least one token bucket.

18. (Original) The method of claim 17, wherein the previously received packets were marked with the same determined precedence value in succession.

19. (Original) The method of claim 17, wherein the precedence value is inversely proportional to the determined number of tokens.

20. (Original) The method of claim 17, further comprising determining a number of tokens in a second token bucket and wherein the determining a precedence value is based on the number of tokens in the second token bucket if the first token bucket has tokens less than a size of the received packet.

21. (Original) The method of claim 17, further comprising marking the packet with the determined precedence value or the upgraded precedence value.

22. (Currently Amended) A packet marking system, comprising:  
a receiving engine capable of receiving a packet;  
a marker engine, communicatively coupled to the receiving engine, capable of determining a number of tokens in a first token bucket and capable of determining a precedence value for marking the packet based on the determined number of tokens; and  
an upgrade engine, communicatively coupled to the marker engine, capable of upgrading the determined precedence value to a higher precedence value when a pre-specified number of previously received packets were marked with the same determined precedence value, wherein

the marking engine is configured to mark packet for a particular forwarding treatment using at least one token bucket.

23. (Original) The system of claim 22, wherein the previously received packets were marked with the same determined precedence value in succession.

24. (Original) The system of claim 22, wherein the precedence value is inversely proportional to the determined number of tokens.

25. (Original) The system of claim 22, wherein the marker engine is further capable of determining a number of tokens in a second token bucket and the marker determines a precedence value based on the number of tokens in the second token bucket if the first token bucket has tokens less than a size of the received packet.

26. (Original) The system of claim 22, wherein the marker engine is further capable of marking the packet with the determined precedence value or the upgraded precedence value.

27. (Currently Amended) A computer-readable medium having stored thereon instructions to execute a method, the method comprising:

receiving a packet;

determining a number of tokens in a first token bucket;

determining a precedence value for marking the packet based on the determined number of tokens; ~~and~~

upgrading the determined precedence value to a higher precedence value when a pre-specified number of previously received packets were marked with the same determined precedence value; and

marking packet for a particular forwarding treatment using at least one token bucket.

28. (Currently Amended) A system, comprising:

means for receiving a packet;

means for determining a number of tokens in a first token bucket;

means for determining a precedence value for marking the packet based on the determined number of tokens; ~~and~~

means for upgrading the determined precedence value to a higher precedence value when a pre-specified number of previously received packets were marked with the same determined precedence value; and

means for marking packet for a particular forwarding treatment using at least one token bucket.